

## About the Department

The Department of Chemical Engineering was commenced in the year 1988. The PG programme of M.Tech. in Chemical Engineering and Ph.D. was started in the year 2006 and 2004 respectively. The current sanctioned strength of B.Tech. and M.Tech programs Chemical Engineering is 100 and 25 respectively for full time Courses. The Department is well equipped with good undergraduate laboratories and research laboratories. The Department aims to provide students with a balance of intellectual and practical expertise that enables them to serve the worldwide chemical industry as well as the societal needs. The curriculum has been designed to meet the program goals and objectives that lay more stress on learning under the guidance of a vibrant and highly qualified faculty.

## About Jaipur

Jaipur is a lively and vibrant city in the state of Rajasthan and is situated in Northern India at a distance of around 265 km from Delhi. Jaipur offers a multitude of interesting places and tourist attractions. There are several magnificent palaces and forts such as the Hawa Mahal, Amber Fort, Jaigarh Fort, Nahargarh Fort, Jal Mahal, City Palace, Jantar Mantar etc., which are situated at the heart of the city. It is a city of fun, food and festivals. It is well known as the "Pink City" which is a heady mix of tradition and modernity. Jaipur is very well connected to other parts of the country through air, rail and road. The weather of Jaipur in the month of January is pleasant, and the temperature in the day time remains between 18 to 22 °C.

## Local Accommodation

Accommodation at the Institute Guest houses will be available on payment basis. The details regarding boarding and lodging are as follows: Rates:

**Guest House 1 (Limited capacity):** (Single occupancy, double-bedded a/c room): Rs. 950/- per day.

**Guest House 2:** (Single occupancy, double-bedded a/c room): Rs. 750/- per day.

**Aurobindo Boys Hostel:** (Single occupancy, single-bedded non a/c room): Rs. 200/- per day.

**Gargi Girls Hostel:** (Dormitory): Rs. 200/- per day (Single occupancy, single-bedded non a/c room).

## Major Topic that will be focused in the workshop

- Introduction to Fuel cell, Fundamental & application, Reaction Kinetics, Cell charge and mass transport, Electro-Catalysis, Characterization, Fuel Processing, Fuel cell Stacks : Overview
- Hydrogen storage

### Registration fee

Students from MNIT Rs. 500/-

Students from other institutes Rs 1000/-

Academician Rs. 2000/-

Industries & R&D labs Rs. 2000 /-

The students are requested to confirm their participation through a mail (given below). Participations from academic institutes and industries are requested to send a Demand Draft in favor of "REGISTRAR, MNIT Jaipur" payable at Jaipur with a print out of the filled in Registration form, by Courier/ Speed Post/ Registered Post before 15<sup>th</sup> January, 2020 to: Dr. Sonal & Dr. Neetu Kumari, Assistant Professor, Department of Chemical Engineering, MNIT, J.L.N. Marg, Jaipur-302017, Rajasthan, India. Or You may email a scanned copy of the DD and the signed registration form by the deadline to

**Dr. Sonal**

sonal.chem@mnit.ac.in (9549650891)

**Dr. Neetu Kumari**

neetu.chem@mnit.ac.in (9549650416)

**Dr. V. Subbaramaiah**

vsr.chem@mnit.ac.in (9549650141)



## Fuel Cell: Fundamentals and Applications 27<sup>th</sup> - 31<sup>st</sup> Jan, 2020

### REGISTRATION FORM

Name.....

Category Academic/Student/Industry/R&D)

Designation: .....

Department: .....

Institution: .....

Town/City: .....

Country: .....

E-mail: .....

Mobile No: .....

Registration Fee: .....

**Payment by DD in favour of "REGISTRAR, MNIT JAIPUR" payable at Jaipur. Cash/D.D.**

No. : .....

**Accommodation required?**

.....

Date: ..... Signature



## About work shop

In connection with the energy efficient processes, Fuel Cells have emerged as more efficient devices that converts chemical energy in a fuel into electrical energy. Fuel Cells are superior to other power generating techniques available today. A fuel cell operating on pure hydrogen emits zero emissions at the source and produces water as by product. Some stationary fuel cells use natural gas or hydrocarbons as a hydrogen feedstock, but even these systems produce far fewer emissions than conventional power plants. There are no moving parts in a fuel cell stack, making them more reliable and quieter than generators. Unlike batteries that must be disposed of once their chemicals are used up, fuel cell reactions do not degrade over time and can theoretically provide continuous electricity. Traditional power plants must be large in order to gain efficiency, but fuel cells can achieve higher efficiencies at any scale, making them perfect for small portable, residential, and transportation uses. The workshop is designed for Under Graduate, Post Graduate, Research Scholars and University Faculty members.

### About MNIT

The college was established in 1963 with the name as Malaviya Regional Engineering College, Jaipur, as a joint venture of the Government of India and the Government of Rajasthan, subsequently; on June 26, 2002 the college has been given the status of National Institute of Technology and on 15 August 2007. The institute was declared as of National Importance through Act of Parliament. The Institute is fully funded by Ministry of Human Resource Development (MHRD), Government of India. More than 12,000 students have already been graduated since its establishment.

## Organizing committee

### Patron

Prof. Udaykumar R Yaragatti  
Director MNIT Jaipur

### Chairman

Dr. Madhu Agarwal

### Conveners

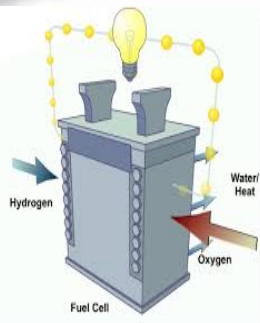
Dr. Neetu Kumari  
Dr. Sonal  
Dr. Kapil Pareek  
Dr. Madhu Agarwal

### Coordinators

Dr. U. K. Arun Kumar  
Dr. V. Subbaramaiah  
Dr. Rohidas Bhoi  
Dr. Oayes Midda

### Address for Correspondence

Dr. Sonal & Dr. Neetu Kumari  
Department of Chemical Eng.  
MNIT, J.L.N. Marg,  
Jaipur Rajasthan-302017



## A Five Days short term course on Fuel Cell: Fundamentals and Applications

(27<sup>th</sup> - 31<sup>th</sup> Jan, 2020)



Organized  
by

Departments of  
Chemical Engineering  
&  
Center for Energy &  
Environment

**Malaviya National Institute of  
Technology Jaipur**